| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
|------------|------|---|---|---------------------|---------|------------------|
| L1 | 218 | (332/109).CCLS. | US-PGPUB; USPAT | OR | OFF | 2006/03/20 12:55 |
| L2 | 187 | I1 and @ad<"20030717" | US-PGPUB; USPAT | OR | OFF | 2006/03/20 13:07 |
| L3 | 127 | mallinson.in. | US-PGPUB; USPAT | OR | OFF | 2006/03/20 13:07 |
| S1 | 60 | (pulse adj width adj (modulator modulation)) and digital adj filter and clock adj rate and @ad<"20030717" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/06 10:26 |
| S2 | 0 | S1 and (oversampling "over sampling" "over sample" "over sampler" oversample oversampler) adj (modulat\$3) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/27 10:42 |
| S 3 | 1 | S1 and (oversampling "over sampling" "over sample" "over sampler" oversample oversampler) near2 (modulat\$3) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/27 10:43 |
| S4 | 11 | S1 and (oversampling "over sampling" "over sample" "over sample" oversampler) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/27 10:43 |
| S5 | 4 | S4 and ("sigmal delta" "sigma-delta" sigmadelta) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/27 11:07 |
| S6 | 8 | (("5777512") or ("5974089") or ("6414560") or ("6515604")).PN. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/27 11:07 |
| S7 | 60 | (pulse adj width adj (modulator modulation)) and digital adj filter and clock adj rate and @ad<"20030717" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/27 11:57 |
| S8 | 11 | S7 and (oversampling "over sampling" "over sample" "over sample" oversampler) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/27 12:08 |

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|-----|-----|--|---|----|-----|------------------|
| S9 | 78 | (oversampling "over sampling") adj modulat\$3 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/27 12:08 |
| S10 | 71 | (oversampling "over sampling") adj modulat\$3 and @ad<"20030717" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/27 12:08 |
| S11 | 7 | S10 and (pwm "pulse width modulation") | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/27 12:32 |
| S12 | 2 | S11 and digital adj filter | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/27 12:09 |
| S13 | 7 | S10 and (pwm "pulse width modulation" (pulse adj width adj modulat\$3)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/27 12:39 |
| S14 | 151 | ("sigma delta" sigmadelta "sigma-delta" "delta sigma" "delta-sigma" deltasigma) near (oversampl\$3 over adj sampl\$3) near modulat\$3 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/27 12:40 |
| S15 | 143 | ("sigma delta" sigmadelta "sigma-delta" "delta sigma" "delta-sigma" deltasigma) near (oversampl\$3 over adj sampl\$3) near modulat\$3 and @ad<"20030717" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/27 12:40 |
| S17 | 66 | S15 and digital adj filter | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/27 12:41 |
| S18 | 5 | S17 and pulse adj width | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/27 14:12 |

| S19 | 14 | (pulse adj width adj modulat\$4) and ((oversampl\$4 over adj (sampl\$4)) near modulat\$4) same (delta adj sigma deltasigma "delta-sigma" sigma adj delta sigmadelta "sigma-delta") and @ad<"20030717" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/27 14:35 |
|-----|-------|---|---|----|-----|------------------|
| S20 | 13 | ("5245345").URPN. | USPAT | OR | OFF | 2004/12/27 14:26 |
| S21 | 45700 | (pulse adj width adj modulat\$4) and @ad<"20030717" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/27 14:36 |
| S22 | 449 | S21 and (delta adj sigma deltasigma "delta-sigma" sigma adj delta sigmadelta "sigma-delta") | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/27 14:37 |
| S23 | 27 | S21 and (delta adj sigma deltasigma "delta-sigma" sigma adj delta sigmadelta "sigma-delta") near ("d/a" "a/d" "digital to analog" "analog to digital") near converter | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/27 14:38 |
| S24 | 2 | ("5,245,343").PN. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/27 14:41 |
| S25 | 10 | S23 and ("over sampl\$3" oversampl\$3 "over-sampl\$3") | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/27 14:51 |
| S26 | 9016 | pulse adj width adj modulator and @ad<"20030717" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/27 14:51 |
| S27 | 132 | S26 and digital adj filter | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/27 14:52 |
| S28 | 14 | S27 and (delta adj sigma deltasigma "delta-sigma" sigma adj delta sigmadelta "sigma-delta") same (oversampl\$4 over adj (sampl\$4)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/27 15:22 |

| S29 | 2 | ("6466087").PN. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/27 15:53 |
|-----|-----|--|---|----|-----|------------------|
| S30 | 150 | (first 1st) adj order adj (delta adj sigma deltasigma "delta-sigma" sigma adj delta sigmadelta "sigma-delta") adj modulator | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/27 16:00 |
| S31 | 0 | (first 1st) adj order adj (delta adj sigma deltasigma "delta-sigma" sigma adj delta sigmadelta "sigma-delta") adj modulator and (IIR infinite adj impulse adj response) adj filter near3 (low adj pass "low-pass" lpf) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/27 16:00 |
| 532 | 130 | (IIR infinite adj impulse adj response) adj filter near3 (low adj pass "low-pass" lpf) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/27 16:00 |
| S33 | 49 | (first 1st) adj order adj (delta adj sigma deltasigma "delta-sigma" sigma adj delta sigmadelta "sigma-delta") adj modulator and audio | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/28 11:22 |
| S34 | 41 | (IIR infinite adj impulse adj response) adj filter near3 (low adj pass "low-pass" lpf) and audio | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/27 16:02 |
| S35 | 0 | (IIR infinite adj impulse adj response) adj filter near3 (low adj pass "low-pass" lpf) near3 single adj pole and audio | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/27 16:03 |
| S36 | 1 | (IIR infinite adj impulse adj response) adj filter near3 (low adj pass "low-pass" lpf) near3 single adj pole | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/27 16:03 |
| S37 | 2 | ("5245345").PN. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/28 11:30 |

3/20/06 1:14:36 PM C:\Documents and Settings\AFlanders\My Documents\EAST\Workspaces\10621504.wsp Page 4

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|-----|-----|---|---|----|-----|------------------|
| S38 | 0 | ((two "2") adj channel adj output) and ((eight "8") adj channel adj output) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/28 11:31 |
| S39 | 19 | ((eight "8") adj channel adj output) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/28 12:08 |
| S40 | 2 | ("6243686").PN. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/28 13:44 |
| S41 | 2 | ("6425018").PN. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/28 13:46 |
| S42 | 2 | ("5903871").PN. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/28 13:46 |
| S43 | 2 | ("6466087").PN. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/29 11:32 |
| S44 | 588 | (700/94).CCLS. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/30 09:50 |
| S45 | 1 | modulation adj depth near4 ("-1 db" "0 db" "-1db" "0db") | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/30 09:59 |
| S46 | 13 | harmonic adj distortion near4 ("90db" "100db" "90 db" "100 db") | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/01/05 14:01 |
| S48 | 49 | modulation adj depth same pulse adj width and @ad<"20030717" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/01/05 10:07 |

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|-----|-----|--|---|----|-----|------------------|
| S49 | 2 | modulation adj depth same pulse adj width same db and @ad<"20030717" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/12/30 10:01 |
| S50 | 1 | modulation adj depth same pulse adj width and (audio music sound) and @ad<"20030717" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/01/05 10:11 |
| S51 | 214 | modulation adj depth and pulse adj width and @ad<"20030717" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/01/05 10:16 |
| S52 | 61 | modulation adj depth and pulse adj width and @ad<"20030717" not optical | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/01/05 10:21 |
| S53 | 2 | ("6466087").PN. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/01/05 10:21 |
| S54 | 2 | ("4555795").PN. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/01/05 14:01 |
| S56 | 2 | ("4555795").PN. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/01/06 09:51 |
| S57 | 2 | ("6735398").PN. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/01/06 09:55 |
| S58 | 0 | ("pulse width modulator" pwm) with ("digital filter") with (distortion noise) near reduction | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/06/16 15:49 |
| S59 | 76 | ("pulse width modulator" pwm) with ("digital filter") | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/06/16 15:50 |

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|-----|------|--|---|----|-----|------------------|
| S60 | 62 | S59 and @ad<"20030717" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/06/16 15:50 |
| S61 | 0 | ("pulse width modulator" pwm) with ("digital filter") with ((distortion noise) near reduction) | US-PGPUB; USPAT | OR | OFF | 2005/08/03 09:47 |
| S62 | 5 | ("pulse width modulator" pwm) with ("digital filter") with ((distortion noise)) | US-PGPUB; USPAT | OR | OFF | 2005/08/03 11:17 |
| S63 | 2 | ("pulse width modulator" pwm) and ("digital filter") and (oversampl\$4 adj modulat\$4) | US-PGPUB; USPAT | OR | OFF | 2005/08/03 11:20 |
| S64 | 6 | ("pulse width modulator" pwm) and (filter) and (oversampl\$4 adj modulat\$4) | US-PGPUB; USPAT | OR | OFF | 2005/08/03 11:20 |
| S65 | 1 | ("6466087").PN. | US-PGPUB; USPAT | OR | OFF | 2005/08/03 11:22 |
| S66 | 19 | ("5144308" "5745061" "5777512" "5889482" "5901176" "5990815" "6011501" "6087969" "6140952" "6150969" "6344811").PN. OR ("6466087").URPN. | US-PGPUB; .USPAT; USOCR | OR | OFF | 2005/08/03 11:38 |
| S67 | 440 | "class d" and PWM ("pulse width modulator") near digital adj filter | US-PGPUB; USPAT; USOCR | OR | OFF | 2005/08/03 11:38 |
| S68 | 1 | ("class d") and (PWM ("pulse width modulator")) near digital adj filter | US-PGPUB; USPAT; USOCR | OR | OFF | 2005/08/03 11:41 |
| S69 | 1096 | (330/10).CCLS. | US-PGPUB; USPAT | OR | OFF | 2005/08/03 11:45 |
| S70 | 315 | S69 and ("pwm" "pulse width modulator") and @ad<"20030717" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/08/03 11:46 |
| S71 | 275 | S70 and filter | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/08/03 11:46 |
| S72 | 28 | S71 and oversampl\$ | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/08/03 11:46 |

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|-----|-----|---|---|----|-----|------------------|
| S73 | 13 | ("4520438" "5023566" "5057720" "5548286" "5617058" "5629616" "5939931" "5982231" "6014055" "6028476" "6097249" "6107876").PN. OR ("6593807").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2005/08/03 11:47 |
| S74 | 297 | ("pulse width modulator" pwm) with ((distortion noise) near (reduc\$4 remov\$4 correct\$4)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/08/03 11:53 |
| S75 | 267 | S74 and @ad<"20030717" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/08/03 11:53 |
| S76 | 4 | S75 and digital adj filter | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/08/03 11:56 |
| S77 | 1 | S76 and oversampl\$ | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/08/03 11:53 |
| S78 | 2 | ("6414613").PN. OR ("6727832"). URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2005/08/03 11:57 |
| S79 | 15 | ("5548286" "5777512" "5784017" "5815102" "5866969" "5901176").PN. OR ("6373334"). URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2005/08/03 11:57 |
| S80 | 7 | (("sigma delta" "sigmadelta" "sigma-delta") adj modulat\$5) and (pwm pulse adj width adj modulat\$5) near (distortion noise error) | US-PGPUB; USPAT; USOCR | OR | OFF | 2005/08/03 12:02 |
| S81 | 9 | (("6795004") or ("5559467") or ("5974089") or ("6344811") or ("6466087") or ("6794930") or ("5, 777,512") or ("5,974,089") or ("6, 414,560") or ("6,515,604")).PN. or (2004/0165661).CCLS. | US-PGPUB; USPAT | OR | OFF | 2005/08/03 12:07 |
| S82 | 22 | ("sigma-delta" "sigmadelta" "sigma delta") and (pwm pulse adj width adj modulat\$5) and (IIR "Infinite impulse response") | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/08/03 12:08 |
| S83 | 0 | ("2005/0012545").URPN. | USPAT | OR | OFF | 2005/08/03 12:14 |

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|-----|----|---|---|----|-----|------------------|
| 584 | 27 | correct adj (pwm "pulse width" adj modulat\$5) | USPAT | OR | OFF | 2005/08/03 12:15 |
| S85 | 10 | ("4818996" "5153593").PN. OR ("5977896").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2005/08/03 12:45 |
| S86 | 42 | (708/307).CCLS. | US-PGPUB; USPAT | OR | OFF | 2005/08/03 12:45 |
| S87 | 42 | S86 and @ad<"20030717" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/08/03 12:45 |
| S88 | 10 | ("4818996" "5153593").PN. OR ("5977896").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2005/08/03 12:48 |
| S89 | 62 | (pulse adj width adj (modulator modulation)) and digital adj filter and clock adj rate and @ad<"20030717" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/08/03 12:51 |
| S90 | 62 | (pulse adj width adj (modulator modulation)) and digital adj filter and (over adj sampl\$5 oversampl\$5) and @ad<"20030717" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/08/03 12:51 |
| S91 | 90 | (pulse adj width adj (modulat\$5) pwm) and (digital adj filter) and (over adj sampl\$5 oversampl\$5) and @ad<"20030717" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/08/03 12:52 |
| S92 | 1 | (pulse adj width adj (modulat\$5) pwm) near (noise distortion) and (digital adj filter) and (over adj sampl\$5 oversampl\$5) and @ad<"20030717" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/08/03 12:52 |
| S93 | 2 | ("6414613").PN. OR ("6727832"). URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2005/08/03 12:59 |
| 594 | 85 | (341/77).CCLS. | US-PGPUB; USPAT | OR | OFF | 2005/08/03 12:59 |
| S95 | 82 | S94 and @ad<"20030717" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/08/03 12:59 |
| S96 | 7 | ("5469475").URPN. | USPAT | OR | OFF | 2005/08/03 13:03 |
| S97 | 30 | filter adj ("pwm" pulse width modulat\$) adj output | USPAT | OR | OFF | 2005/08/03 13:04 |

| S98 | 29 | S97 and @ad<"20030717" | USPAT | OR | OFF | 2005/08/03 13:03 |
|----------|------|--|---|----|-----|------------------|
| S99 | 7 | filter adj ("pwm" "pulse width" adj modulat\$) adj output | USPAT | OR | OFF | 2005/08/03 13:04 |
| S10 0 | 11 | (IIR "infinite impulse response") and (feedback "feed back") and ("sigma delta" "delta sigma" "sigma-delta" "delta-sigma" "sigmadelta" "deltasigma") and (pwm "pulse width" adj modulat\$5) | USPAT | OR | OFF | 2005/08/03 13:06 |
| S10 1 | 15 | ("4178557" "4831334" "5132637" "5410280" "5617058" "5699383" "5886573" "5959499" "6054896" "6078216" "6147553" "6342810" "6373334" "6407635").PN. OR ("6593806"). URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2005/08/03 13:09 |
| S10 2 | 1751 | ((341/143) or (341/152)).CCLS. | US-PGPUB; USPAT | OR | OFF | 2005/08/08 12:00 |
| S10 3 | 1660 | S102 and @ad<"200030717" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/08/08 12:03 |
| S10 4 | 78 | (332/107).CCLS. | US-PGPUB; USPAT | OR | OFF | 2005/08/08 12:04 |
| S10 6 | 55 | S104 and @ad<"20030717" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/08/08 12:14 |
| S10 7 | 143 | 332/106 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/08/08 12:14 |
| S10 8 | 164 | (332/106).CCLS. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/08/08 12:14 |
| S11 2 | 57 | S108 and @ad<"20030717" | US-PGPUB; USPAT | OR | OFF | 2005/08/08 12:20 |
| S11 3 | 0 | 708/305.ccls | US-PGPUB; USPAT | OR | OFF | 2005/08/08 12:20 |
| S11 4 | 26 | (708/305).CCLS. | US-PGPUB; USPAT | OR | OFF | 2005/08/08 12:20 |
| S11 5 | 68 | (708/305,307).CCLS. | US-PGPUB; USPAT | OR | OFF | 2005/08/08 12:21 |

| S11 6 | 68 | S115 and @ad<"20030717" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/08/08 12:25 |
|----------|------|---|---|----|-----|------------------|
| S11 7 | 1990 | (341/152,143).CCLS. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/08/08 12:26 |
| S11 8 | 1751 | (341/143,152).CCLS. | US-PGPUB; USPAT | OR | OFF | 2005/08/08 12:27 |
| S11 9 | 1493 | S118 and @ad<"20030717" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/08/08 12:27 |
| S12 0 | 1355 | S119 and (pwm pulse modulat\$4) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/08/08 12:27 |
| S12 1 | 142 | S119 and (pwm pulse adj modulat\$4) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/08/08 12:44 |
| S12 2 | 2 | ("6515604").PN. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/08/08 12:44 |
| S12 3 | 13 | ("5055846" "5243345" "5274375" "5392042" "5420892" "5724037" "5757300" "5805093" "5859603" "6307493" "6362763" "6404369").PN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2005/08/08 12:46 |
| S12 4 | 2 | ("5,777,512").PN. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/08/08 12:46 |
| S12 5 | 0 | ("sigma delta" "delta sigma") adj to adj (pwm pulse adj witdth adj modulat\$4 pulse adj modulat\$4) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/08/08 12:47 |

| S12 6 | 159 | ("sigma delta" "delta sigma") with (pwm pulse adj witdth adj modulat\$4 pulse adj modulat\$4) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/08/08 12:47 |
|----------|-------|---|---|------|-----|------------------|
| S12 7 | 103 | S126 and @ad<"20030717" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/08/08 12:47 |
| S12 8 | 136 | ("sigma delta" "delta sigma") with (pwm pulse adj witdth adj modulat\$4 pulse adj modulat\$4) | US-PGPUB; USPAT | OR . | OFF | 2005/08/08 12:47 |
| S12 9 | 84 | S128 and @ad<"20030717" | US-PGPUB; USPAT | OR | OFF | 2005/08/08 13:17 |
| S13 0 | 33122 | ("381").CLAS. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/08/08 13:18 |
| S13 | 268 | S130 and ("pwm" pulse adj width adj modulat\$4 pulse adj modulat\$4) | US-PGPUB; USPAT | OR | OFF | 2005/08/08 13:19 |
| S13 2 | 21948 | (700/94).CCLS. or ("381").CLAS. | US-PGPUB; USPAT | OR | OFF | 2005/08/08 13:18 |
| S13 3 | 273 | S132 and ("pwm" pulse adj width adj modulat\$4 pulse adj modulat\$4) | US-PGPUB; USPAT | OR | OFF | 2005/08/08 13:21 |
| S13 4 | 231 | S133 and @ad<"20030717" | US-PGPUB; USPAT | OR | OFF | 2005/08/08 13:21 |
| S13 6 | 2 | (("6466087") or ("6208279")).PN. | US-PGPUB; USPAT | OR | OFF | 2005/10/06 11:30 |
| S13 7 | 6 | (digital adj filter) with (pwm "pulse width modulator" "pulse width modulation") with noise and @ad<"20030717" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/10/07 13:50 |
| S13 8 | 72 | (digital adj filter) with (pwm "pulse width modulator" "pulse width modulation") and @ad<"20030717" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/10/07 16:31 |
| S13 9 | 31020 | "375"/\$ and filter | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/10/07 16:32 |

| S14 | 785 | "375"/\$ and filter near (noise | US-PGPUB; | OR | OFF | 2005/10/07 16:22 |
|----------|--------|---|---|------|-----|------------------|
| 0 | 765 | distortion) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OK . | OFF | 2005/10/07 16:32 |
| S14 1 | 472 | (375/238).CCLS. | US-PGPUB; USPAT | OR | OFF | 2006/02/09 15:34 |
| S14 2 | 381 | S141 and @ad<"20030717" | US-PGPUB; USPAT | OR | OFF | 2006/02/09 15:35 |
| S14 3 | 249 | S142 and (noise error) | US-PGPUB; USPAT | OR | OFF | 2006/02/09 15:36 |
| S14 4 | 12 | ("4140980" "4724396" "5077539" "5378933" "5451893" "5506532" "5521549" "5594324" "5617058" "5708433" "5963106" "6466087").PN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2006/02/09 15:39 |
| S14 5 | 0 | "over sampl\$4" and ("sigma delta" "delta sigma") and @ad<"20030717" | US-PGPUB; USPAT | OR | OFF | 2006/02/09 16:30 |
| S14 6 | 0 | "oversampl\$4" and ("sigma delta" "delta sigma") and @ad<"20030717" | US-PGPUB; USPAT | OR | OFF | 2006/02/09 16:30 |
| S14 7 | 0 | "over sampl\$4" and ("sigma delta" "delta sigma") | US-PGPUB; USPAT | OR | OFF | 2006/02/09 16:30 |
| S14 8 | 0 | "over sampl\$4" | US-PGPUB; USPAT | OR | OFF | 2006/02/09 16:30 |
| S14 9 | 0 | "over-sampl\$4" | US-PGPUB; USPAT | OR | OFF | 2006/02/09 16:30 |
| S15 0 | 0 | "ove-sampl\$4" | US-PGPUB; USPAT | OR | OFF | 2006/02/09 16:30 |
| S15 1 | 0 | "oversampl\$4" | US-PGPUB; USPAT | OR | OFF | 2006/02/09 16:30 |
| S15 2 | 697136 | (over and sampl\$4) | US-PGPUB; USPAT | OR | OFF | 2006/02/09 16:30 |
| S15 3 | 589 | (over adj sampl\$4) and ("sigma delta" "delta sigma") and @ad<"20030717" | US-PGPUB; USPAT | OR | OFF | 2006/02/09 16:31 |
| S15 4 | 263 | S153 and (audio sound music) | US-PGPUB; USPAT | OR | OFF | 2006/02/09 16:31 |
| S15 6 | 1 | ("6208279").PN. | US-PGPUB; USPAT | OR | OFF | 2006/02/13 10:50 |
| S15 7 | 281 | pcm with pcm with resolution | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/02/14 10:59 |

| S15 8 | 245 | S157 and @ad<"20030717" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/02/14 10:59 |
|----------|---------|--|---|----|-----|------------------|
| S15 9 | 84 | S158 and digital adj audio | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/02/14 11:12 |
| S16 0 | 586 | (375/242).CCLS. | US-PGPUB; USPAT | OR | OFF | 2006/02/14 11:12 |
| S16 1 | 0 | S160 and @ad<"200307" | US-PGPUB; USPAT | OR | OFF | 2006/02/14 11:13 |
| S16 2 | 2932669 | "17" | US-PGPUB; USPAT | OR | OFF | 2006/02/14 11:13 |
| S16 3 | 435 | S160 and @ad<"20030717" | US-PGPUB; USPAT | OR | OFF | 2006/02/14 11:13 |
| S16 4 | 2 | S163 and pcm with resolution | US-PGPUB; USPAT | OR | OFF | 2006/02/14 11:14 |
| S16 5 | 2105 | (375/241-254).CCLS. | US-PGPUB; USPAT | OR | OFF | 2006/02/14 11:14 |
| S16 6 | 1 | S165 and @ad<"20030717" and "first resolution" and "second resolution" | US-PGPUB; USPAT | OR | OFF | 2006/02/14 11:15 |
| S16 7 | 1 | S165 and @ad<"20030717" and "second resolution" | US-PGPUB; USPAT | OR | OFF | 2006/02/14 11:16 |
| S16 8 | 0 | S165 and @ad<"20030717" and "pcm to pcm conversion" | US-PGPUB; USPAT | OR | OFF | 2006/02/14 11:16 |
| S16 9 | 165 | S165 and @ad<"20030717" and pcm with conversion | US-PGPUB; USPAT | OR | OFF | 2006/02/14 11:16 |
| S17 0 | 52 | S165 and @ad<"20030717" and (reduce lower) with resolution | US-PGPUB; USPAT | OR | OFF | 2006/02/14 11:17 |
| S17 | 1 | ("6466087").PN. | US-PGPUB; USPAT | OR | OFF | 2006/03/15 10:06 |
| S17 2 | 20 | ("5144308" "5745061" "5777512" "5889482" "5901176" "5990815" "6011501" "6087969" "6140952" "6150969" "6344811").PN. OR ("6466087").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2006/02/14 11:29 |
| S17 3 | 1138 | (oversampling "over sampling") with ("sigma delta" "delta sigma") | US-PGPUB; USPAT; USOCR | OR | OFF | 2006/02/14 11:30 |

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| S17 4 | 35 | ((oversampling "over sampling") with ("sigma delta" "delta sigma")) same (pcm "pulse code modulation") and @ad<"20030717" | US-PGPUB; USPAT; USOCR | OR | OFF | 2006/02/14 11:30 |
|----------|------|--|----------------------------------|----|-----|------------------|
| S17 5 | 1990 | ((700/94) or (330/10)).CCLS. | US-PGPUB; USPAT | OR | OFF | 2006/03/15 10:06 |
| S17 6 | 1591 | S175 and @ad>"2002" | US-PGPUB; USPAT | OR | OFF | 2006/03/15 10:07 |
| S17 7 | 46 | (pwm "pulse width" pulse) same (filter) same (oversampl\$4 over adj sampl\$4) | EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/03/20 11:17 |
| S17 8 | 371 | (pwm "pulse width" pulse) near (noise distortion error) same (filter) | EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/03/20 11:18 |
| S17 9 | 1 | ((pwm "pulse width" pulse) near (noise distortion error) same (filter)) and (oversampl\$4 or over adj sampl\$4) | EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/03/20 11:18 |
| S18 0 | 577 | 375/238 | US-PGPUB; USPAT | OR | OFF | 2006/03/20 12:18 |
| S18 1 | 480 | 375/238.ccls. | US-PGPUB; USPAT | OR | OFF | 2006/03/20 12:18 |
| S18 2 | 383 | S181 and @ad<"20030717" | US-PGPUB; USPAT | OR | OFF | 2006/03/20 12:54 |

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